









ABOUT ENVIS

ENVIS (Environmental Information System) is a network of subject-specific centres located in various institutions throughout India. The focal point of the present 66 ENVIS centres in India is at the Ministry of Environment and Forests, New Delhi, which further serves as the Regional Service Centre (RSC) for INFOTERRA, the global information network of the United Nations Environment Programme (UNEP) to cater to environment information needs in the South Asian sub-region. The primary objective of all ENVIS centres is to collect, collate, store and disseminate environment related information to various user groups, including researchers, policy planners and decision makers.

The ENVIS Centre at the Bombay Natural History Society was set up in June 1996 to serve as a source of information on Avian Ecology.

Objectives of the ENVIS Centre at BNHS

- ∠To create a bibliographic database of published literature related to avian ecology study



BUCEROS Vol. 17, No. 3, 2012



BUCEROS

ENVIS Newsletter Avian Ecology Vol. 17, No. 3, 2012

ENVIS TEAM AT THE BNHS

Project Coordinator

Dr. Asad R. Rahmani

Scientist-in-Charge

Divya N. Warrier

Information Officer

Nita Shashidharan

Data Processing Assistant

Tejashree D. Nakashe

EDITORIAL TEAM

Dr. Asad R. Rahmani Dr. Gayatri Ugra Mr. Sujit S. Narwade Mrs. Divya N. Warrier

Compiled by

Divya N. Warrier

Cover design and page layout

Tejashree D. Nakashe Nita Shashidharan

Cover

Black-necked Grebe *Podiceps nigricollis*by Bhasmang Mehta

Illustrations

Carl D'silva / BNHS John Henry Dick / BNHS Rashmi Patil

© ENVIS-BNHS 2013: All rights reserved. This publication shall not be reproduced either in full or in part in any form, either in print or electronic or any other medium, without the prior written permission of the Bombay Natural History Society.

Bombay Natural History Society, Hornbill House, S.B. Singh Road, Mumbai 400 001, Maharashtra, India.

Tel.: (91-22) 2284 8967 Fax: (91-22) 2283 7615 E-mail: bnhs@envis.nic.in Website: www.bnhsenvis.nic.in

Special Issue on Participation of ENVIS Centre in COP-11

CONTENTS

Editorial2
Organizational News
ENVIS News
Article
Participation of ENVIS staff at COP-11, 2012
I. About COP-11
a) Introduction to CBD and COP4
b) A Summary of COP meetings4
c) United Nations - Decade on Biodiversity 2011–2020
d) India as a host for COP-116
e) The Eleventh Conference of Parties, 20127
II. COP-11 Events on
a) Avian Ecology
b) Biodiversity Information Systems9



EDITORIAL

Greetings!

It is indeed a pleasure to introduce this special issue on *Participation of ENVIS Centre in COP-11* to all our readers. I would like to take this opportunity to first bring to your attention a few key points about CBD, COP-11 event in India and further give you a glimpse of what lies in store in the current issue.

The Convention on Biological Diversity (CBD) evolved in the form of an agreement signed by member nations of United Nations Environment Programme (UNEP) to accomplish one of the missions of the Earth Summit 1992 held at Rio, Brazil – *To Protect Biodiversity*. Apart from biodiversity, the Convention also targets promotion of safe use of biotechnology and curb the unfair use of genetic resources. The member nations of the Convention are called 'Parties' and these parties meet at regular intervals at the Conference of Parties (COP).

It had been a proud moment for India to host the 11th Conference of Parties to the CBD Secretariat in October 2012 at Hyderabad, India. BNHS was chosen as the facilitator for NGOs and therefore held a very responsible position in communicating with the NGOs and civil society representatives of India, before and also during the main event.

I sincerely thank Dr. Asad R. Rahmani, Director and ENVIS Project Co-ordinator, BNHS, who facilitated the presence of BNHS staff at COP-11. The event was an eye-opener as all of us experienced firsthand how an international event of this level, where global environmental issues and their solutions are discussed and communicated to policy makers across the globe, is conducted.

This issue of *BUCEROS* follows the previous pre-COP-11 special issue that highlighted the information discovery and data dissemination done by our Centre, which coincidentally also conforms to the Aichi Biodiversity Target 19, one of the 20 biodiversity targets set at COP-10. Through this issue, we have tried to give a brief overview of what CBD-COP is all about. It majorly highlights the COP-11 side-events attended by the Centre's staff, most of which were related to biodiversity informatics and birds.

I hope you enjoy reading this issue as much as we enjoyed the event and scripting this issue of *BUCEROS*.

*Divya Warrier*Scientist-In-Charge

ORGANIZATIONAL NEWS

The BNHS was identified during COP-10 at Nagoya, Japan, as a nodal organization to host the global NGO Alliance of Convention on Biological Diversity (CBD) for COP-11. The Indian NGO Forum for CBD (INFC) was formed to discuss conservation concerns and people's issues in COP-11 and to provide a common platform for NGOs and representatives of civil society. A charter was worked out for INFC which deals with issues such as common interests, consented broad positions, engagement with the government and funding. BNHS was the facilitator for NGOs and civil society representatives for dialogue and inputs during COP and worked in close association with NGOs across India to ensure optimum participation by them in COP-11. A team of 35 delegates from BNHS, largely comprising young researchers, attended this international event.



The BNHS had the largest delegation at CBD COP-11

Left (L–R): Dr. Asad Rahmani, ENVIS Project Coordinator and Director, BNHS, with Mr. Homi Khusrokhan, President, BNHS and Dr. Braulio Ferreira de Souza Diaz, CBD Executive Secretary.

Right: BNHS team at COP-11

ENVIS NEWS

The ENVIS team got a wonderful opportunity to attend the 11th Conference of Parties (COP) to the Convention on Biological Diversity (CBD) held at Hyderabad, Andhra Pradesh, India from October 8–19, 2012. The Centre published a special issue of *BUCEROS* for the event, featuring a technical paper on the role played by the Centre in data discovery and data dissemination. To broadcast the activities of the Centre, brochures and a banner were displayed at the event. The staff interacted with over 4000 delegates and distributed 1000 copies of the *BUCEROS* newsletter.

Approximately 40 new members were added to the Centre's mailing list. The staff also benefited from attending this Conference. It not only exposed them to globally relevant issues on biodiversity conservation but also gave them an opportunity to promote the activities of the Centre to a global audience.



BNHS-ENVIS Project Co-ordinator and In-Charge at COP-11



Participation of ENVIS staff at COP-11, 2012

I) About COP-11

a) Introduction to CBD and COP

The global concern over loss of biodiversity found expression in the Convention on Biological Diversity (CBD), which was adopted at the Rio Earth Summit in 1992. Among the plethora of international treaties, the CBD stands apart as the one convention that is at the heart of human wellbeing.

The three objectives of the Convention are:

- 1. Conservation of biodiversity
- 2. Sustainable use of its components and
- 3. Fair and equitable sharing of benefits arising from the use of genetic resources.

The Conference of Parties (COP) is the governing body of the CBD and advances implementation of the Convention through the decisions it takes at its periodic meetings. The Parties meet to reaffirm their commitment to the three pillars of CBD. COPs to the CBD are the most important global conferences on biodiversity held biennially. 193 countries are parties to the Convention including India. Since 1992, ten meetings of the COP to the CBD have been held.

b) A Summary of COP meetings

COP	Year	Venue	Summary
meeting			
COP-1	November -December 1994	Nassau	In its first meeting, the general framework for the
		(Bahamas)	Convention's implementation was set by
			◆ Establishment of the CHM and the SBSTTA
			◆ Designation of the GEF as the interim financial
			mechanism
COP-2	November 1995	Jakarta	◆ A decision on marine and coastal biodiversity (the
		(Indonesia)	Jakarta Mandate) was adopted
			◆ Open-ended <i>ad hoc</i> Working Group on Biosafety to
			elaborate a protocol on biosafety was established
COP-3	November 1996	Buenos Aires	A Memorandum of Understanding was adopted by the
		(Argentina)	COP with the GEF
COP-4	May 1998	Bratislava	◆ Establishment of a Working Group on Article 8(j)
		(Slovakia)	(traditional knowledge)
			◆ Establishment of a panel of experts on ABS
			◆ Adoption of a work programme on forest biodiversity
			and the GTI
COP-5	May	Nairobi	◆ Adoption of work programmes on dry and sub-humid
	2000	(Kenya)	lands, incentive measures, Article 8(j), and agricultural
			biodiversity
			◆ Endorsement of the description of ecosystem approach
			◆ Establishment of a Working Group on ABS

СО	P-6	April 2002	The Hague (Netherlands)	 Adoption of the Convention's Strategic Plan, including the target to significantly reduce the rate of biodiversity loss by 2010 Adoption of an expanded work programme on forest biodiversity Adoption of the Bonn Guidelines on ABS Adoption of guiding principles for invasive alien species Adoption of GSPC Adoption of a work programme for the GTI
СО	P-7	February 2004	Kuala Lumpur (Malaysia)	 Adoption of work programmes on mountain biodiversity, protected areas, and technology transfer and cooperation Mandate given to the ABS Working Group to initiate negotiations on an international regime on ABS Adoption of a decision to review implementation of the Convention, its Strategic Plan and progress towards achieving the 2010 target Adoption of the Akwé: Kon Guidelines Adoption of guidelines on biodiversity and tourism development
СО	P-8	March 2006	Curitiba (Brazil)	 Adoption of a work programme on island biodiversity Mandate given to the ABS Working Group to complete its work on an international regime on ABS before COP-10
СО	P-9	May 2008	Bonn (Germany)	 Adoption of a strategy for resource mobilization, scientific criteria and guidance for marine areas in need of protection Adoption of a roadmap for the negotiation of the international ABS regime Establishment of an <i>ad hoc</i> technical expert group on biodiversity and climate change
CO	P-10	October 2010	Nagoya (Japan)	Adoption of the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits arising from their utilization

Abbreviations used in the table (in order of appearance)

CHSM - Clearing House Mechanism

SBSTTA - Subsidiary Body on Scientific, Technical and Technological Advice

Strategy

GEF - Global Environment Facility

ABS - Access and Benefit Sharing

GTI - Global Taxonomy Initiative

GSPC - Global Strategy for Plant Conservation

Elaboration on some of the protocols announced at COP meetings

Article 8(j) - The CBD recognizes the dependency of indigenous and local communities on biological diversity and their unique role in conserving life on Earth.



◆ Adoption of the CBD Strategic Plan for the period 2011–2020, including the Aichi biodiversity targets
◆ Adoption of a decision on activities and indicators for the implementation of the Resource Mobilization



Jakarta Mandate - The Jakarta Mandate on Marine and Coastal Biological Diversity is a global consensus on the importance of marine and coastal biological diversity.

Bonn Guidelines on ABS - The Guidelines were recognized as a useful first step of an evolutionary process in the implementation of relevant provisions of the Convention related to access to genetic resources and benefit-sharing.

Addis Ababa Principles and Guidelines - The Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity consist of fourteen interdependent practical principles, operational guidelines, and a few instruments for their implementation that govern the uses of components of biodiversity to ensure the sustainability of such uses.

c) United Nations - Decade on Biodiversity 2011–2020

2010 was the International Year of Biodiversity. The Secretariat of the Convention on Biological Diversity is the focal point for the International Year of Biodiversity. The Nagoya Protocol was adopted during COP-10, 2010 held at Nagoya, Japan. On December 22, 2010, the UN declared the period from 2011 to 2020 as the UN-Decade on Biodiversity and also the Aichi Biodiversity Targets as key elements of the new Strategic Plan for Biodiversity. The targets are organized under five strategic goals. Goals and targets comprise the aspirations for achievement at the global level, and a flexible framework for the establishment of national or regional targets. Parties are invited to set their own targets within this flexible framework, taking into account national needs and priorities, while also bearing in mind national contributions to the achievement of the global targets. For more details on the targets, please visit <a href="http://www.cbd.int/sp/targets/and.http://www.cbd.int/sp/ta

d) India as a host for COP-11

The eleventh meeting of the COP to the CBD took place at Hyderabad, India, from October 8–19, 2012, a first for the host country.

India is a mega-diverse country rich in biodiversity. Despite intense biotic pressure, India harbours 7–8% of the world's biodiversity. With a strong legal and policy framework on biodiversity, some recent positive initiatives relevant to biodiversity taken up include: The Biological Diversity Act (2002), Forests



Mrs. Jayanthi Natarajan, Minister of Environment and Forest, being handed over the gavel and COP Presidency by Japanese Government representatives

Rights Act (2006) and the Mahatma Gandhi National Rural Employment Guarantee Act (2005). India is globally recognized as a pioneer, trendsetter and a major player in biodiversity issues.

Hosting of COP-11 for the first time has brought focus on the need for balancing economic development, demographic pressures and environmental conservation in developing countries such as India, and the need to spread awareness for better use and management of biological resources among different stakeholders. COP-11 has provided a unique platform to display, promote, interact, learn and network from each others' experiences and knowledge relating to biodiversity.

e) The eleventh Conference of Parties, 2012

The slogan of the eleventh Conference of Parties, *Prakriti Rakshati Rakshita* (Nature Protects if She is Protected), appropriately reflects the reverence for biodiversity that is deep-rooted in Indian culture. The COP logo was developed by National Institute of Design, Ahmedabad, for the Government of India. This logo symbolises the cycle of life with a tiger, a dolphin, a bird, a leaf, and a woman with grain depicting the linkage of biodiversity with livelihoods. The conservation of biodiversity is a national imperative for the country since the livelihoods of millions of our people depend on it. India is committed as a mega-diverse country to assume an important role in dealing with the biodiversity agenda at the global level.

As one of the fastest growing economies with international recognition of its global role and responsibilities, India is a strong contender for permanent Membership of the UN Security Council. India is already recognized as a leader of the developing world in environmental

multilateral forums such as United Nations Framework Convention on Climate Change (UNFCCC), CBD, United Nations Forum on Forests (UNFF), and Global Environment Facility (GEF). Hosting of COP-11 has facilitated the process of India emerging as a leading voice in biodiversity conservation while defining and driving the global agenda for the next few years.

CBD COP-11 adopted 33 decisions on a range of strategic, substantive, administrative, financial, and budgetary issues. For a detailed report on the decisions taken at COP-11, please visit:

http://www.cbd.int/doc/decisions/COP-11/full/COP-11-dec-en.pdf http://www.iisd.ca/vol09/enb09595e.html



II) COP-11 Events on avian ecology and biodiversity information systems

The following is a list of events related to birds and biodiversity informatics at COP-11 attended by ENVIS staff:

a) Events related to Avian Ecology

1) Enhancing synergies among MEAs: the CMS family Online Reporting System (ORS) – development, experiences and the potential for Ramsar Convention and other MEAs

The Online Reporting System (ORS) is a new state-of-the-art electronic platform to revolutionize reporting under Multilateral Environment Agreements (MEA). The system has been developed by UNEP-WCMC and the Secretariat of the African-Eurasian Waterbird Agreement (UNEP-AEWA) with support from the Norwegian Government to UNEP. The ORS will help national authorities to ensure that their reports provide the best basis for decision-making, and to provide relevant high quality information in a timely and efficient manner so that the best decisions are taken to safeguard biodiversity.

The ORS is designed as a flexible tool for the creation of online national reports and is especially customized to the needs of MEAs and their online national reporting processes. The ORS allows MEA Secretariats to design and quickly update their national reporting templates. It allows MEA staff to make the changes to the templates directly and requires no programming by the MEA Secretariat. There are many options for customizing individual questionnaires with different question types, dependencies, flexible re-ordering of questions and sophisticated looping questions as well as filtering options.

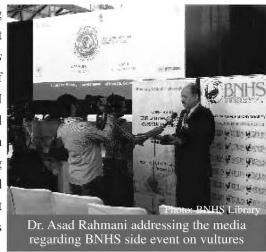




2) Conserving Critically Endangered Gyps vultures in Asia

The event included presentations on conservation initiatives taken by member organizations of Saving Asia's Vultures from Extinction (SAVE). SAVE partners include: Bombay Natural History Society (India), Bird Conservation Nepal, Royal Society for Protection of Birds (RSPB), UK, National Trust for Nature Conservation, Nepal, International Centre for Birds of Prey, UK, and Zoological Society of London.

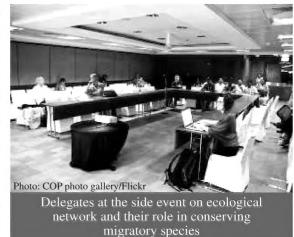
The approach and method of the vulture breeding programme centres of BNHS were presented at the session. Past and present status of *Gyps* vultures was discussed with possible causes of population decline. The role of RSPB and IUCN in vulture conservation was explained. National Trust for Nature Conservation, an NGO from Nepal, presented their success story in creating vulture safe zones in Nepal with the help of Bird Conservation Nepal and RSPB. The current status of phasing out of diclofenac and use of its alternative, meloxicam, were discussed.



3) The role of ecological networks in the conservation of migratory species

The event addressed ecological networks and shared case studies on integrating the concept into the design of protected areas (PAs) and on building strategic alliances internationally to identify critical sites and coordinate conservation efforts. An introduction to the concept of ecological networks, and summary of the work of CMS in this area, was presented. It was emphasized that ecological networks promote connectivity between biodiversity hotspots and habitats used by species through corridors and stepping stones and that the first step will be to map critical sites along migration routes.

Examples of the Norwegian government were presented as to how it has provided funding to CMS to improve understanding of networks and key sites in order to replicate lessons and best practices. The role of mobile pastoralists, as custodians and protectors of wild migratory species routes, was highlighted, which incidentally helps to boost the ecological function of these routes. The importance of livestock for ecosystem functions such as dispersal of insects and seeds, landscape shaping, fertilization, and disturbance was noted.



4) A first global network of key sites for seabird conservation: their uses for informing EBSAs and other marine conservation initiatives

The side event started with an introduction to marine IBAs and how ecologically important they are, especially for migratory species. There were presentations on marine IBAs identified in Japan and India. Members of the Forum for Conservation of Patagonian Sea also presented their work with respect to monitoring seabird populations and identifying and conserving critical breeding habitats along the Patagonian Sea.

A new Marine IBA e-atlas (http://www.birdlife.org/datazone/marine) was launched at the event. The e-Atlas covers over 3,000 Marine Important Bird Areas (IBAs) worldwide. It is the result of six years of effort that involves around 40 BirdLife Partners, with the world's leading seabird scientists from inside and outside the BirdLife Partnership, in collaboration with government departments of conservation, environment and fisheries, and the secretariats of several international conventions (CBD, EU Birds Directive, Nairobi Convention). Over 150 marine IBAs have already been recognised in the CBD process to identify Ecologically or Biologically

Significant Marine Areas (EBSAs).

The e-Atlas provides essential information for conservationists and policy makers; for energy sector planners (windfarms, gas and oil exploration and drilling); for fisheries managers; for marine pollution management planners; and for the insurance industry. Like a Google Map, the e-atlas will be dynamically updated as new sites are identified and new data about them become available.

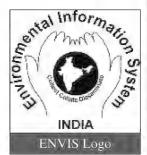


Some of the other events on Avian Ecology included

- 1. Ecologically or Biologically Significant Marine Areas by CBD Secretariat
- 2. The Connected Planet: Cooperating to reduce threats to Arctic migratory waterbirds along major flyways by Conservation of Arctic Flora and Fauna, in partnership with the Ramsar Convention on Wetlands, the Convention of Migratory Species, and the African-Eurasian Waterbird Agreement

b) Events related to Biodiversity Information Systems

Biodiversity Informatics is a developing discipline that applies information technology tools and techniques in collection, collation, analysis, and dissemination of an enormous volume of biodiversity data. The ENVIS programme of MoEF also falls in this discipline and its objectives conform to Aichi Biodiversity Target 19 of the CBD. Hence the following COP-11 events on biodiversity informatics have been incorporated in this document:



1) From the sidelines to the mainstream: engaging newer communities in biodiversity data publishing

The discussion was about new avenues that are being tapped as a data source for biodiversity monitoring and can be utilized to decide upon new policies regarding biodiversity conservation. These new avenues include local government, impact assessment practitioners, wildlife managers, and citizen scientists. There were presentations showcasing some collaborative pilot projects that have tapped the different data sources mentioned above. These included an Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) capacity building project involving institutions from India and Norway, using camera trap data to monitor the state of wildlife in national parks and biodiversity corridors. On the basis of data collected from this project, a draft *Best Practice Guide: Publishing biodiversity data associated with multi-media objects, with a focus on camera-traps* was prepared that has been put up for public review by the GBIF on their website (Link: http://www.gbif.org/orc/?doc_id=4921). Representatives of various national and international institutions presented the work done on this aspect by their respective countries.

2) Launch of Indian Bioresource Information Network by Dr. M.S. Swaminathan

The Indian Bioresource Information Network (IBIN) portal (www.ibin.gov.in) was launched by Dr. M.S. Swaminathan, eminent agricultural scientist and founder of the M.S. Swaminathan Foundation of India. IBIN builds on a 14 years old agreement between India's Department of Biotechnology (DBT) and the Indian Space Research Organisation (ISRO) to combine remote sensing data with ground observations to characterize biodiversity and landscapes. Landscape characterization is important for any evolving landscape conservation strategy. DBT has already



compiled three databases – one on biodiversity characterization at the landscape level, which comprises a spatial database on vegetation/land use types, landscape fragmentation, disturbance regimes, species richness, biodiversity value, and biological (plant) richness. A second database is on plants, animals, marine, and microbial resources, while a third is on vegetation, forest cover, and other landscape elements.

3) Release of a new web portal on mammals - IBIS Mammals

The portal *IBIS-Mammals* (http://www.ebiodiversity.net/mammals/) is the latest in a series of web portals envisaged under Indian Biodiversity Information System (IBIS). It is a web-based information system comprising scientific species-level information on approximately 423 species of Indian mammals. A user-friendly system, *IBIS-Mammals* provides the status, distribution, habitat, and all other mammal related information from a single portal, aiding species conservation and promoting public participatory data sharing for conservation. It is also an excellent online resource for biodiversity education and awareness. The archives include

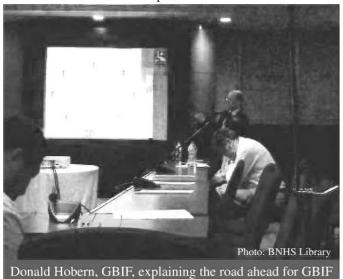


general species profiles, excerpts from copyright-free books, a wide range of literature such as research articles, biodiversity reports, distributional and behavioural data, all indexed on one platform and made accessible in a few clicks. The portal has 75,000+ museum records of mammals in India, supplemented by Geographical Information System (GIS) maps of all museum records as geo-spatial layers, overlaid on the distribution maps. A similar portal comprised of species-level information on Indian birds called *AVIS-IBIS* (http://avis.indianbiodiversity.org/) already exists.

4) The Global Biodiversity Informatics Outlook: a 10-year road map for Biodiversity Intelligence

The Global Biodiversity Informatics Outlook (GBIO) was introduced as a result of the Global Biodiversity Informatics Conference (GBIC), organized in July 2012. At the Conference, more than 100 experts from a range of disciplines shared their ideas for better mobilizing, organizing and using biodiversity data of all types, helping to understand and model the diversity of life on Earth and our impacts upon it, informing decision-making and contributing to global objectives including the Aichi Biodiversity Targets.

The GBIO is a developing set of documents, setting out 20 key components of a biodiversity intelligence framework. The aim of this outlook is to put together diffused data into one data set so that all are aware of the data and of the reviews it goes through. Representatives of Global Biodiversity Information Facility (GBIF), Natural History Museum, presented their work in relevance to the objectives of the Outlook. The presenters emphasized the need to incorporate data mobilization into best practice.



The Ministry of Environment and Forests, Government of India and the National Biodiversity Authority (NBA), Government of India, also launched the National Biodiversity Information Outlook (NBIO) Report in a separate event during COP-11. This report was prepared by Wildlife Institute of India with inputs from various experts and Ministries. The report outlines the biodiversity data and information management plan of India by establishing a National Biodiversity Grid and Indian National

Biodiversity Information Facility in the country. The report can be accessed on the following link: http://www.gbif.org/orc/?doc_id=4940&l=en

5) Role of natural history e-groups in bridging the gap between scientists and citizens and their contribution towards conservation of Indian wildlife

The event started with a brief history on e-groups and the benefits of being part of e-groups. Dr. V. Shubhalaxmi, BNHS, presented the results of an online survey which revealed interesting statistics regarding members of the natural history e-groups. The survey revealed that the





majority of the members join e-groups for networking opportunities, followed by those who join to get information regarding photographs taken by them.

The most interesting find was that sharing information through such groups has also helped in discovery of new species, exemplified by the discovery of a new moth species by Dr. Shubhalaxmi. E-groups have boosted exchange of information on distribution of species, have potential to groom future biologists and can bridge the gap between scientists and the layman. Interestingly, they have also brought into focus the significance of lesser known taxa.



6) Novel science-based approaches to assessing and responding to biodiversity crisis

Global biodiversity targets are in danger of being missed because of inadequate capacity and tools to gather and assess data. Experts were of the opinion that lack of data may affect the fourth Global Biodiversity Outlook, scheduled for 2014, which will rely on actions and progress on the Aichi Biodiversity Targets. Braulio Ferreira de Souza Dias, Executive Secretary, CBD opined that the problem is particularly acute in developing countries, which are home to most global biodiversity and are facing the brunt of environmental change, but have the least capacity for monitoring biodiversity.

Many countries lack data sets with geographically accurate information on key components of biodiversity, at genetic, species, and ecosystem levels, Georgios Sarantakos, Biodiversity Specialist, Group on Earth Observations (GEO), told the session. Countries also lack the capacity and tools to use and combine sets of information. Most countries do not openly share field data that is available, and where data is shared, it is often not in a consistent format that can be used effectively by international groups. It was stressed upon by the experts that biodiversity funders



initiative of his organization

should push for open access of data, and governments should invest more in ground and remote sensing observations. Linda Krueger, Vice President (Policy), Wildlife Conservation Society, stated that biodiversity data is scattered among different institutions, people, and projects. It was felt that biodiversity assessments also require social science inputs, and an understanding of how different components of biodiversity benefit ecosystems and social actors.



Some of the other events on Biodiversity Informatics included

- IPBES capacity building initiatives and networks How could they also support
 implementation of the convention on biological diversity? by Norwegian Directorate for
 Nature Management in cooperation with the United Nations Development Programme
 (UNDP) and the United Nations Environment Programme World Conservation
 Monitoring Centre (UNEP-WCMC)
- **2.** *IPBES From Establishment to Operationalization* by UNEP, UNESCO, FAO, UNDP, and Government of Germany
- 3. Informing the Design and Implementation of National Biodiversity Strategies and Action Plans (NBSAPs) by BirdLife International
- **4.** World Flora Online by 2020 by Global Partnership for Plant Conservation (GPPC) and Missouri Botanical Garden
- **5.** Panel discussion on inspiring an open Participatory Biodiversity Information Systems for India by Foundation for Ecological Security
- **6.** *InforMEA: Assisting in the Implementation of Obligations and the Aichi Targets* by United Nations Environment Programme & Multilateral Environment Agreements



Installations depicting a caring Mother Nature and self-indulgent Man at COP-11 venue



BNHS Director presenting the NGO Alliance baton to delegates from South Korea, where the next COP will be held



Registered with the Registrar of Newspapers under No. MAHENG/2002/9451 ISSN 0972-1037

BOMBAY NATURAL HISTORY SOCIETY

Founded in 1883 for the study of natural history, the Bombay Natural History Society (BNHS) is now one of the premier research and conservation organisations in the country. The Society publishes a journal, the *Journal of the Bombay Natural History Society*, devoted to natural history and also has a popular publication, *Hornbill*, for the layman. It has also published a number of books on wildlife and nature. Its library has a large collection of books and scientific journals on wildlife and the environment. The Society's invaluable collection of bird, mammal, reptile, amphibian and insect specimens has been recognised as a National Heritage Collection.

Membership of the Society is open to individuals and institutions within India and abroad. For more details, please write to:

Membership Officer,
Bombay Natural History Society,
Hornbill House,
Shaheed Bhagat Singh Road,
Mumbai 400 001, INDIA.

BUCEROS is an ENVIS (Environmental Information System) newsletter published thrice a year by the ENVIS Centre at the BNHS, sponsored by the Ministry of Environment and Forests, New Delhi.

The Centre collects, collates, stores and disseminates information on Avian Ecology.

Address for correspondence

Project Coordinator Tel: (91-22) 22848967

ENVIS Centre, Fax: (91-22) 22837615

Bombay Natural History Society, Email: bnhs@envis.nic.in

Hornbill House, Shaheed Bhagat Singh Road, Website: www.bnhsenvis.nic.in

DISCLAIMER: The views expressed in this newsletter are not those of the editors or of the BNHS.

Printed by Bro. Leo at St. Francis Industrial Training Institute, Borivli, Mumbai 400 103 and Published by the Honorary Secretary for the Bombay Natural History Society, Hornbill House, Shaheed Bhagat Singh Road, Mumbai 400 001.